007BB—Blanket silt loam, 1 to 3 percent slopes

Map Unit Composition

Blanket: 100 percent

Component Descriptions

Blanket
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Clayey alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 9 inches; silt loam
H2—9 to 30 inches; silty clay
H3—30 to 60 inches; silty clay loam

007BC—Blanket silty clay loam, 1 to 3 percent slopes, eroded

Map Unit Composition

Blanket: 100 percent

Component Descriptions

Blanket
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Clayey alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 9 inches; silty clay loam
H2—9 to 30 inches; silty clay
H3—30 to 60 inches; silty clay loam

007GB—Grant silt loam, 1 to 3 percent slopes

Map Unit Composition

Grant: 100 percent

Component Descriptions

Grant
MLRA: 78 - Central Rolling Red Plains
Landform: Terrace on upland
Parent material: Residuum
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe24-32)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 50 inches; silt loam
H3—50 to 60 inches; silt loam

007PA—Pond Creek silt loam, 0 to 1 percent slopes

Map Unit Composition

Pond Creek: 100 percent

Component Descriptions

Pond Creek
MLRA: 78 - Central Rolling Red Plains
Landform: Terrace
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Upland (pe24-32)
Land capability (nonirrigated): 1

Typical Profile:
H1—0 to 11 inches; silt loam
H2—11 to 60 inches; silty clay loam

007PD—Pond Creek silt loam, 1 to 3 percent slopes

Map Unit Composition

Pond Creek: 100 percent

Component Descriptions

Pond Creek
MLRA: 78 - Central Rolling Red Plains
Landform: Terrace
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Upland (pe24-32)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 11 inches; silt loam
H2—11 to 60 inches; silty clay loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

025CS—Carey silt loam, 1 to 3 percent slopes

Map Unit Composition

Carey: 100 percent

Component Descriptions

Carey
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 1 to 3 percent
Depth to restrictive feature: More than 60 inches to bedrock
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 7 inches; silt loam
H2—7 to 24 inches; loam
H3—24 to 60 inches; loam

025CY—Carey silt loam, 3 to 6 percent slopes

Map Unit Composition

Carey: 100 percent

Component Descriptions

Carey
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 3 to 6 percent
Depth to restrictive feature: More than 60 inches to bedrock
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 7 inches; silt loam
H2—7 to 24 inches; loam
H3—24 to 60 inches; loam

025MS—Missler silty clay loam, 0 to 2 percent slopes

Map Unit Composition

Missler: 100 percent

Component Descriptions

Missler
MLRA: 78 - Central Rolling Red Plains
Landform: Plain on tableland
Parent material: Calcareous silty and clayey eolian deposits
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 10 inches; silty clay loam
H2—10 to 60 inches; silty clay loam

025RF—Roxbury silt loam, occasionally flooded

Map Unit Composition

Roxbury: 100 percent

Component Descriptions

Roxbury
MLRA: 73 - Rolling Plains and Breaks
Landform: Flood plain on river valley
Parent material: Calcareous fine-silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 21 inches; silt loam
H2—21 to 36 inches; silty clay loam
H3—36 to 60 inches; silty clay loam

025SH—Shellabarger loam, 2 to 5 percent slopes

Map Unit Composition

Shellabarger: 100 percent

Component Descriptions

Shellabarger
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 2 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 11 inches; loam
H2—11 to 29 inches; sandy clay loam
H3—29 to 60 inches; coarse sandy loam

097HB—Harney silt loam, 1 to 3 percent slopes

Map Unit Composition

Harney: 100 percent

Component Descriptions

Harney
MLRA: 73 - Rolling Plains and Breaks
Landform: Plain on tableland
Parent material: Loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 5 inches; silt loam
H2—5 to 28 inches; silty clay loam
H3—28 to 60 inches; silty clay loam

097LH—Lancaster-Hedville complex, 4 to 20 percent slopes

Map Unit Composition

Lancaster: 65 percent
Hedville: 35 percent

Component Descriptions

Lancaster
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 4 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 13 inches; loam
H2—13 to 23 inches; loam
Cr—23 to 23 inches; weathered bedrock

Hedville
MLRA: 73 - Rolling Plains and Breaks

Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 4 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Sandstone (pe20-25)
Land capability (nonirrigated): 7s

Typical Profile:
H1—0 to 11 inches; fine sandy loam
H2—11 to 15 inches; cobbly loam
R—15 to 15 inches; unweathered bedrock

Ab—Abilene silt loam, 0 to 1 percent slopes

Map Unit Composition

Abilene: 100 percent

Component Descriptions

Abilene
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Calcareous old alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 35 inches; silty clay loam
H3—35 to 60 inches; silty clay loam

Ac—Abilene silt loam, 1 to 3 percent slopes

Map Unit Composition

Abilene: 100 percent

Component Descriptions

Abilene
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Calcareous old alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 35 inches; silty clay loam
H3—35 to 60 inches; silty clay loam

AED—Arents, Earthen Dam

An—Albion sandy loam, 1 to 4 percent slopes

Map Unit Composition

Albion: 100 percent

Component Descriptions

Albion
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 8 inches; sandy loam
H2—8 to 16 inches; sandy loam
H3—16 to 28 inches; loamy sand
H4—28 to 60 inches; sand

As—Albion-Shellabarger sandy loams, 4 to 15 percent slopes

Map Unit Composition

Albion: 65 percent
Shellabarger: 35 percent

Component Descriptions

Albion
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 4 to 15 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 5.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 8 inches; sandy loam
H2—8 to 16 inches; sandy loam
H3—16 to 28 inches; loamy sand
H4—28 to 60 inches; sand

Shellabarger
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 4 to 15 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 11 inches; sandy loam
H2—11 to 38 inches; sandy clay loam
H3—38 to 60 inches; coarse sandy loam

Bt—Buttermilk silt loam, rarely flooded

Map Unit Composition

Buttermilk: 100 percent

Component Descriptions

Buttermilk
MLRA: 78 - Central Rolling Red Plains
Landform: Terrace
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 9.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: About 54 to 72 inches
Runoff class: Negligible

Ecological site: Saline Lowland (pe20-25)
Land capability (nonirrigated): 3s

Typical Profile:
H1—0 to 19 inches; silt loam
H2—19 to 44 inches; silt loam
H3—44 to 60 inches; silt loam

Ca—Canadian fine sandy loam, rarely flooded

Map Unit Composition

Canadian: 100 percent

Component Descriptions

Canadian
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain, river valley
Parent material: Alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 1.98 in/hr)
Available water capacity: Moderate (About 8.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Terrace (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 17 inches; fine sandy loam
H2—17 to 27 inches; fine sandy loam
H3—27 to 60 inches; fine sandy loam

Cc—Carey silt loam, 0 to 2 percent slopes

Map Unit Composition

Carey: 100 percent

Component Descriptions

Carey
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 0 to 2 percent
Depth to restrictive feature: More than 60 inches to bedrock
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 34 inches; loam
H3—34 to 60 inches; loam

Cd—Carey silt loam, 2 to 5 percent slopes

Map Unit Composition

Carey: 100 percent

Component Descriptions

Carey
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 2 to 5 percent
Depth to restrictive feature: More than 60 inches to bedrock
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)

Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 34 inches; loam
H3—34 to 60 inches; loam

Ch—Case clay loam, 1 to 3 percent slopes

Map Unit Composition

Case: 100 percent

Component Descriptions

Case
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; clay loam
H2—8 to 60 inches; clay loam

Ck—Case clay loam, 3 to 7 percent slopes

Map Unit Composition

Case: 100 percent

Component Descriptions

Case
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 8 inches; clay loam
H2—8 to 60 inches; clay loam

Cm—Case clay loam, 7 to 15 percent slopes

Map Unit Composition

Case: 100 percent

Component Descriptions

Case
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Alluvium
Slope: 7 to 15 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; clay loam
H2—8 to 60 inches; clay loam

Co—Clairemont silt loam, occasionally flooded

Map Unit Composition

Clairemont: 100 percent

Component Descriptions

Clairemont
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 13 inches; silt loam
H2—13 to 60 inches; silt loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

Cp—Clairemont loam, channeled

Map Unit Composition

Clairemont: 100 percent

Component Descriptions

Clairemont
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 15 inches; loam
H2—15 to 60 inches; silt loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

Cr—Clark clay loam, 0 to 1 percent slopes

Map Unit Composition

Clark: 100 percent

Component Descriptions

Clark
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 10 inches; clay loam

H2—10 to 60 inches; loam

Cs—Clark clay loam, 1 to 3 percent slopes

Map Unit Composition

Clark: 100 percent

Component Descriptions

Clark
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 10 inches; clay loam
H2—10 to 60 inches; clay loam

Ct—Clark clay loam, 3 to 6 percent slopes

Map Unit Composition

Clark: 100 percent

Component Descriptions

Clark
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 3 to 6 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 10 inches; clay loam
H2—10 to 60 inches; clay loam

Cw—Clark-Kingsdown complex, 5 to 12 percent slopes

Map Unit Composition

Clark: 55 percent
Kingsdown: 45 percent

Component Descriptions

Clark
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 6 to 12 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 8 inches; clay loam
H2—8 to 60 inches; clay loam

Kingsdown
MLRA: 78 - Central Rolling Red Plains
Landform: Sand sheet on paleoterrace on tableland
Parent material: Loamy eolian deposits
Slope: 0 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Sandy (pe20-25)
Land capability (irrigated): 4e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 10 inches; fine sandy loam
H2—10 to 27 inches; fine sandy loam
H3—27 to 60 inches; fine sandy loam

Dc—Dale silt loam, rarely flooded

Map Unit Composition

Dale: 100 percent

Component Descriptions

Dale
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.8 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Terrace (pe20-25)
Land capability (nonirrigated): 1

Typical Profile:
H1—0 to 22 inches; silt loam
H2—22 to 60 inches; silt loam

Ed—Elandco silt loam, occasionally flooded

Map Unit Composition

Elandco: 100 percent

Component Descriptions

Elandco
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 31 inches; silt loam
H2—31 to 60 inches; silt loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

Ef—Elandco silt loam, channeled

Map Unit Composition

Elandco: 100 percent

Component Descriptions

Elandco
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium

Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 31 inches; silt loam
H2—31 to 60 inches; silt loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

Fe—Farnum loam, 0 to 1 percent slopes

Map Unit Composition

Farnum: 100 percent

Component Descriptions

Farnum
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 10 inches; loam
H2—10 to 36 inches; clay loam
H3—36 to 60 inches; clay loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Depression

Ff—Farnum loam, 1 to 3 percent slopes

Map Unit Composition

Farnum: 100 percent

Component Descriptions

Farnum
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 10 inches; loam
H2—10 to 36 inches; clay loam
H3—36 to 60 inches; clay loam

Minor Components
Unnamed Wet Soils
Phase: Loamy, Drainageway

He—Hedville-Rock outcrop complex, 8 to 30 percent slopes

Map Unit Composition

Hedville: 70 percent
Rock outcrop: 30 percent

Component Descriptions

Hedville
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 8 to 30 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Shallow Sandstone (pe20-25)
Land capability (nonirrigated): 7s

Typical Profile:
H1—0 to 19 inches; fine sandy loam
R—19 to 19 inches; unweathered bedrock

Rock outcrop
MLRA: 78 - Central Rolling Red Plains
Drainage class: Excessively drained
Depth to seasonal water saturation: More than 6 feet
Land capability (nonirrigated): 8

Hr—Holdrege silt loam, 1 to 3 percent slopes

Map Unit Composition

Holdrege: 100 percent

Component Descriptions

Holdrege
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Parent material: Calcareous loess
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 7 inches; silt loam
H2—7 to 24 inches; silty clay loam
H3—24 to 29 inches; silty clay loam
H4—29 to 60 inches; silt loam

Kc—Kanza loamy fine sand, Frequently flooded

Map Unit Composition

Kanza: 100 percent

Component Descriptions

Kanza
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 5.5 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Negligible
Land capability (nonirrigated): 5w

Typical Profile:
H1—0 to 10 inches; loamy fine sand
H2—10 to 60 inches; sand

Minor Components
Unnamed Wet Soils
Phase: Sandy, Drainageway

Kf—Kaski loam, rarely flooded

Map Unit Composition

Kaski: 100 percent

Component Descriptions

Kaski
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Terrace (pe20-25)
Land capability (irrigated): 1
Land capability (nonirrigated): 1

Typical Profile:
H1—0 to 22 inches; loam
H2—22 to 37 inches; loam
H3—37 to 60 inches; loam

Kn—Kingsdown fine sandy loam, 0 to 2 percent slopes

Map Unit Composition

Kingsdown: 100 percent

Component Descriptions

Kingsdown
MLRA: 78 - Central Rolling Red Plains
Landform: Sand sheet on paleoterrace on tableland
Parent material: Loamy eolian deposits
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy (pe20-25)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 10 inches; fine sandy loam
H2—10 to 24 inches; fine sandy loam
H3—24 to 60 inches; fine sandy loam

Ko—Kingsdown fine sandy loam, 2 to 5 percent slopes

Map Unit Composition

Kingsdown: 100 percent

Component Descriptions

Kingsdown
MLRA: 78 - Central Rolling Red Plains
Landform: Sand sheet on paleoterrace on tableland
Parent material: Loamy eolian deposits
Slope: 2 to 5 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe20-25)
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; fine sandy loam
H2—10 to 24 inches; fine sandy loam
H3—24 to 60 inches; fine sandy loam

Kr—Krier loam, occasionally flooded

Map Unit Composition

Krier: 100 percent

Component Descriptions

Krier
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 4.4 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Negligible
Ecological site: Saline Subirrigated (pe20-25)
Land capability (nonirrigated): 6s

Typical Profile:
H1—0 to 4 inches; loam
H2—4 to 11 inches; sandy loam
H3—11 to 60 inches; sand

Minor Components
Unnamed Wet Soils
Phase: Loamy, Depression

Ld—Lancaster-Hedville fine sandy loams, 4 to 12 percent slopes

Map Unit Composition

Lancaster: 65 percent
Hedville: 35 percent

Component Descriptions

Lancaster
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 4 to 9 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 16 inches; fine sandy loam
H2—16 to 24 inches; sandy clay loam
H3—24 to 31 inches; sandy clay loam
Cr—31 to 31 inches; weathered bedrock

Hedville
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 7 to 12 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Sandstone (pe20-25)
Land capability (nonirrigated): 7s

Typical Profile:
H1—0 to 19 inches; fine sandy loam
R—19 to 19 inches; unweathered bedrock

Le—Lesho clay loam, occasionally flooded

Map Unit Composition

Lesho: 100 percent

Component Descriptions

Lesho
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Moderate (About 7.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 48 inches
Runoff class: Negligible
Ecological site: Subirrigated (pe20-25)
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 18 inches; clay loam
H2—18 to 30 inches; clay loam
H3—30 to 60 inches; sand

Ln—Lincoln loamy sand, occasionally flooded

Map Unit Composition

Lincoln: 100 percent

Component Descriptions

Lincoln
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 6.00 in/hr)
Available water capacity: Low (About 3.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 60 to 72 inches
Runoff class: Negligible
Ecological site: Sandy Lowland (pe20-25)
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 10 inches; loamy sand
H2—10 to 60 inches; sand

Minor Components
Kanza

Lo—Lincoln sandy loam, occasionally flooded

Map Unit Composition

Lincoln: 100 percent

Component Descriptions

Lincoln
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.9 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 60 to 72 inches
Runoff class: Negligible
Ecological site: Sandy Lowland (pe20-25)
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 12 inches; sandy loam
H2—12 to 60 inches; stratified fine sand to clay loam

Minor Components
Unnamed Wet Soils
Phase: Sandy, Drainageway

Lr—Lincoln-Krier complex, occasionally flooded

Map Unit Composition

Lincoln: 55 percent
Krier: 45 percent

Component Descriptions

Lincoln
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 60 to 72 inches
Runoff class: Negligible
Ecological site: Sandy Lowland (pe20-25)
Land capability (nonirrigated): 6w

Typical Profile:
H1—0 to 8 inches; loamy sand
H2—8 to 60 inches; stratified fine sand to clay loam

Krier
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 4.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Negligible
Ecological site: Saline Subirrigated (pe20-25)
Land capability (nonirrigated): 6s

Typical Profile:
H1—0 to 4 inches; loam
H2—4 to 8 inches; sandy loam
H3—8 to 60 inches; sand

Minor Components
Unnamed Wet Soils
Phase: Sandy, Depression

Unnamed Wet Soils
Phase: Sandy, Drainageway

Oa—Obaro silty clay loam, 5 to 12 percent slopes

Map Unit Composition

Obaro: 100 percent

Component Descriptions

Obaro
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum
Slope: 5 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 6.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 35 inches; silty clay loam
Cr—35 to 35 inches; weathered bedrock

Ob—Obaro-Rock outcrop complex, 10 to 30 percent slopes

Map Unit Composition

Obaro: 75 percent
Rock outcrop: 25 percent

Component Descriptions

Obaro
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum

Slope: 12 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 6.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 35 inches; silty clay loam
Cr—35 to 35 inches; weathered bedrock

Rock outcrop
MLRA: 78 - Central Rolling Red Plains
Slope: 10 to 30 percent
Drainage class: Excessively drained
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Land capability (nonirrigated): 8

Oc—Ost clay loam, 2 to 6 percent slopes

Map Unit Composition

Ost: 100 percent

Component Descriptions

Ost
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 2 to 6 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 8 inches; clay loam
H2—8 to 16 inches; clay loam
H3—16 to 22 inches; clay loam
H4—22 to 60 inches; clay loam

Ph—Port silt loam, occasionally flooded

Map Unit Composition

Port: 100 percent

Component Descriptions

Port
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain, river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.8 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe20-25)
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 10 inches; silt loam
H2—10 to 60 inches; silty clay loam

Po—Pratt loamy fine sand, 5 to 10 percent slopes

Map Unit Composition

Pratt: 100 percent

Component Descriptions

Pratt
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 5 to 10 percent
Drainage class: Well drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sands (pe20-25)
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 9 inches; loamy fine sand
H2—9 to 31 inches; loamy fine sand
H3—31 to 60 inches; loamy fine sand

Pr—Pratt loamy fine sand, 1 to 5 percent slopes

Map Unit Composition

Pratt: 100 percent

Component Descriptions

Pratt
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 1 to 5 percent
Drainage class: Well drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sands (pe20-25)
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 9 inches; loamy fine sand
H2—9 to 31 inches; loamy fine sand
H3—31 to 60 inches; loamy fine sand

Minor Components
Unnamed Wet Soils
Phase: Sandy, Depression

Pt—Pratt-Tivoli loamy fine sands, 5 to 15 percent slopes

Map Unit Composition

Pratt: 75 percent
Tivoli: 25 percent

Component Descriptions

Pratt
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 6 to 12 percent
Drainage class: Well drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sands (pe20-25)
Land capability (irrigated): 3e
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 9 inches; loamy fine sand
H2—9 to 31 inches; loamy fine sand
H3—31 to 60 inches; loamy fine sand

Tivoli
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 10 to 30 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 3.2 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low

Ecological site: Sands (pe20-25)
Land capability (nonirrigated): 7e

Typical Profile:
H1—0 to 7 inches; loamy fine sand
H2—7 to 60 inches; fine sand

Minor Components
Unnamed Wet Soils
Phase: Sandy, Depression

Qr—Quinlan-Woodward loams, 6 to 15 percent slopes

Map Unit Composition

Quinlan: 55 percent
Woodward: 45 percent

Component Descriptions

Quinlan
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum
Slope: 6 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Prairie (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 14 inches; loam
Cr—14 to 14 inches; weathered bedrock

Woodward
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum
Slope: 6 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 30 inches; loam
Cr—30 to 30 inches; weathered bedrock

Qt—Quinlan-Woodward loams, 15 to 30 percent slopes

Map Unit Composition

Quinlan: 55 percent
Woodward: 45 percent

Component Descriptions

Quinlan
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum
Slope: 15 to 30 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Shallow Prairie (pe20-25)
Land capability (nonirrigated): 7e

Typical Profile:
H1—0 to 14 inches; loam
Cr—14 to 14 inches; weathered bedrock

Woodward
MLRA: 78 - Central Rolling Red Plains
Landform: Hillslope on upland
Parent material: Residuum
Slope: 15 to 20 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 30 inches; loam
Cr—30 to 30 inches; weathered bedrock

Sb—St. Paul silt loam, 0 to 1 percent slopes

Map Unit Composition

St. Paul: 100 percent

Component Descriptions

St. Paul
MLRA: 78 - Central Rolling Red Plains
Landform: Divide on upland
Parent material: Seidiments silty residuum
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 14 inches; silty clay loam
H3—14 to 32 inches; silty clay loam
H4—32 to 40 inches; silty clay loam
H5—40 to 60 inches; silty clay loam

Sc—St. Paul silt loam, 1 to 3 percent slopes

Map Unit Composition

St. Paul: 100 percent

Component Descriptions

St. Paul
MLRA: 78 - Central Rolling Red Plains
Landform: Divide on upland
Parent material: Seidiments silty residuum
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 8 inches; silt loam
H2—8 to 14 inches; silty clay loam
H3—14 to 32 inches; silty clay loam
H4—32 to 40 inches; silty clay loam
H5—40 to 60 inches; silty clay loam

Sg—Shellabarger sandy loam, 0 to 1 percent slopes

Map Unit Composition

Shellabarger: 100 percent

Component Descriptions

Shellabarger
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 11 inches; sandy loam
H2—11 to 38 inches; sandy clay loam
H3—38 to 60 inches; coarse sandy loam

Sh—Shellabarger sandy loam, 1 to 3 percent slopes

Map Unit Composition

Shellabarger: 100 percent

Component Descriptions

Shellabarger
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on tableland
Parent material: Alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 11 inches; sandy loam
H2—11 to 38 inches; sandy clay loam
H3—38 to 60 inches; coarse sandy loam

Minor Components
Unnamed Wet Soils
Phase: Sandy, Drainageway

Sm—Shellabarger sandy loam, 3 to 6 percent slopes

Map Unit Composition

Shellabarger: 100 percent

Component Descriptions

Shellabarger
MLRA: 78 - Central Rolling Red Plains
Landform: Paleoterrace on river valley
Parent material: Loamy alluvium
Slope: 3 to 6 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.8 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Sandy (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 11 inches; sandy loam
H2—11 to 38 inches; sandy clay loam
H3—38 to 60 inches; coarse sandy loam

Tv—Tivoli fine sand, 15 to 30 percent slopes

Map Unit Composition

Tivoli: 100 percent

Component Descriptions

Tivoli
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 10 to 30 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Very low (About 3.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Choppy Sands (pe20-25)
Land capability (nonirrigated): 7e

Typical Profile:
H1—0 to 6 inches; fine sand
H2—6 to 60 inches; fine sand

W—Water

Wd—Waldeck fine sandy loam, occasionally flooded

Map Unit Composition

Waldeck: 100 percent

Component Descriptions

Waldeck
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 48 inches
Runoff class: Negligible
Ecological site: Subirrigated (pe20-25)
Land capability (nonirrigated): 3w

Typical Profile:
H1—0 to 13 inches; fine sandy loam
H2—13 to 48 inches; fine sandy loam
H3—48 to 60 inches; sand

Minor Components
Kanza

We—Westview silt loam, 0 to 1 percent slopes

Map Unit Composition

Westview: 100 percent

Component Descriptions

Westview
MLRA: 78 - Central Rolling Red Plains
Landform: Upland
Parent material: Calcareous sediments old silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Upland (pe20-25)
Land capability (irrigated): 1
Land capability (nonirrigated): 2c

Typical Profile:
H1—0 to 15 inches; silt loam
H2—15 to 50 inches; silty clay loam
H3—50 to 60 inches; silty clay loam

Wf—Wellsford clay, 6 to 25 percent slopes

Map Unit Composition

Wellsford: 100 percent

Component Descriptions

Wellsford
MLRA: 78 - Central Rolling Red Plains
Landform: Plain on tableland
Parent material: Residuum
Slope: 6 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Very low (About 2.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Blue Shale (pe20-25)
Land capability (nonirrigated): 6e

Typical Profile:
H1—0 to 5 inches; clay
H2—5 to 17 inches; clay
Cr—17 to 17 inches; weathered bedrock

Wo—Woodward loam, 1 to 3 percent slopes

Map Unit Composition

Woodward: 100 percent

Component Descriptions

Woodward
MLRA: 78 - Central Rolling Red Plains
Landform: Upland
Parent material: Residuum
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 2e

Typical Profile:
H1—0 to 30 inches; loam
Cr—30 to 30 inches; weathered bedrock

Ws—Woodward-Quinlan loams, 3 to 6 percent slopes

Map Unit Composition

Woodward: 65 percent
Quinlan: 35 percent

Component Descriptions

Woodward
MLRA: 78 - Central Rolling Red Plains
Landform: Upland
Parent material: Residuum
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe20-25)
Land capability (nonirrigated): 3e

Typical Profile:
H1—0 to 30 inches; loam
Cr—30 to 30 inches; weathered bedrock

Quinlan
MLRA: 78 - Central Rolling Red Plains
Landform: Upland
Parent material: Residuum
Slope: 3 to 6 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Prairie (pe20-25)
Land capability (nonirrigated): 4e

Typical Profile:
H1—0 to 14 inches; loam
Cr—14 to 14 inches; weathered bedrock

Ye—Yahola fine sandy loam, occasionally flooded

Map Unit Composition

Yahola: 100 percent

Component Descriptions

Yahola
MLRA: 78 - Central Rolling Red Plains
Landform: Flood plain
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe20-25)
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 12 inches; fine sandy loam
H2—12 to 40 inches; fine sandy loam
H3—40 to 60 inches; stratified loam to loamy fine sand

Minor Components
Unnamed Wet Soils
Phase: Sandy, Drainageway

Ze—Zenda clay loam, occasionally flooded

Map Unit Composition

Zenda: 100 percent

Component Descriptions

Zenda
MLRA: 78 - Central Rolling Red Plains
Landform: Dune on paleoterrace on river valley
Parent material: Sandy eolian deposits
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 24 to 48 inches
Runoff class: Negligible
Ecological site: Subirrigated (pe20-25)
Land capability (nonirrigated): 2w

Typical Profile:
H1—0 to 12 inches; clay loam
H2—12 to 60 inches; clay loam

Minor Components
Unnamed Wet Soils
Phase: Clayey, Drainageway